Amendments to the Claims

Claim 1-25 (Cancelled)

Claim 26 (New) A polishing apparatus comprising:

a polishing table having a polishing surface including an outer peripheral portion and a main part;

a top ring adapted to hold a substrate and press a surface of the substrate against said main part of said polishing surface to polish a layer formed on the surface of the substrate, said top ring being swingable on said polishing surface between said main part and said outer peripheral portion of said polishing surface;

at least one notch formed in said outer peripheral portion of said polishing surface; and

at least one optical measuring device disposed adjacent to said at least one notch for measuring a thickness of a layer formed on the surface of the substrate, said at least one notch allowing light emitted from said at least one optical measuring device to pass therethrough,

wherein said top ring is swung radially outwardly to said outer peripheral portion of said polishing surface when the thickness of the layer formed on the surface of the substrate is measured by said at least one optical measuring device, and

wherein said main part of said polishing surface has no through-holes.

Claim 27 (New) A polishing apparatus according to claim 26, wherein said top ring is swingable so that the light emitted from said at least one optical measuring device is incident on at least a central portion of the substrate.

Claim 28 (New) A polishing apparatus according to claim 27, wherein when said top ring is swung to a maximum, an area of the substrate which projects outward beyond an outer circumferential edge of said polishing surface is not more than 40% of an entire area of the surface of the substrate being polished.

Claim 29 (New) A polishing apparatus according to claim 26, further comprising a nozzle operable to supply a cleaning liquid to said at least one optical measuring device.

Claim 30 (New) A polishing apparatus according to claim 26, wherein said polishing surface has at least one additional notch formed in said outer peripheral portion of said polishing surface.

Claim 31 (New) A polishing apparatus comprising:

a rotatable polishing table having a polishing surface including a center portion, an outer peripheral portion, and an intermediate portion between said center portion and said outer peripheral portion;

a top ring adapted to hold a substrate and press a surface of the substrate against said intermediate portion of said polishing surface to polish a layer formed on the surface of the substrate, said top ring being swingable on said polishing surface between said intermediate portion and said outer peripheral portion of said polishing surface;

at least one notch formed in said outer peripheral portion of said polishing surface; and

at least one optical measuring device disposed adjacent to said at least one notch for measuring a thickness of the layer formed on the surface of the substrate, said at least one notch allowing light emitted from said at least one optical measuring device to pass therethrough,

wherein said top ring is swung radially outwardly to said outer peripheral portion of said polishing surface when the thickness of the layer formed on the surface of the substrate is measured by said at least one optical measuring device so that the light emitted from said at least one optical measuring device is incident on at least a central portion of the substrate, and

wherein said intermediate portion of said polishing surface has no through-holes.

Claim 32 (New) A polishing apparatus according to claim 31, wherein when said top ring is swung to a maximum, an area of the substrate which projects outward beyond an outer circumferential edge of said polishing surface is not more than 40% of an entire area of the surface of the substrate being polished.

Claim 33 (New) A polishing apparatus according to claim 31, further comprising a nozzle operable to supply a cleaning liquid to said at least one optical measuring device.

Claim 34 (New) A polishing apparatus according to claim 31, wherein said polishing surface has at least one additional notch formed in said outer peripheral portion of said polishing surface.

Claim 35 (New) A polishing apparatus comprising:

a rotatable polishing table having a polishing surface including a center portion, an outer peripheral portion, and an intermediate portion between said center portion and said outer peripheral portion;

a top ring adapted to hold a substrate and press a surface of the substrate against said intermediate portion of said polishing surface to polish a layer formed on the surface of the substrate, said top ring being swingable on said polishing surface between said intermediate portion and said outer peripheral portion of said polishing surface,

at least one notch formed in said outer peripheral portion of said polishing surface; and

at least one optical measuring device disposed adjacent to said at least one notch for measuring a thickness of the layer formed on the surface of the substrate, said at least one notch allowing light emitted from said at least one optical measuring device to pass therethrough,

wherein said top ring is swung radially outwardly to said outer peripheral portion of said polishing surface when the thickness of the layer formed on the surface of the substrate is measured by said at least one optical measuring device so that the light emitted from said at least one optical measuring device is incident on at least a central portion of the substrate,

wherein said top ring has a mechanism so as to follow an inclination of said polishing surface, and

wherein said intermediate portion of said polishing surface has no through-holes.